In re Appln. of: Dina BEN-YEHUDA et al

Attorney docket: 7640-X05-046

Amendments to the Claims:

Please cancel claims 1-26.

27. (New) A livin-derived peptide selected from one of p30-Livin α and p28-Livin β .

28 (New) A livin-derived peptide selected from one of p30-Livin α and p28-Livin β ,

wherein said p30-Livin α peptide comprises the sequence substantially as defined in

SEQ. ID. NO.1, or functional analogues, derivatives or fragments thereof having pro-

apoptotic activity, and wherein said p28-Livin β peptide comprises the sequence

substantially as defined in SEQ. ID. NO.2, or functional analogues, derivatives or

fragments thereof having pro-apoptotic activity.

29. (New) A peptide as defined in 28, wherein said p30-Livin α is denoted by the amino

acid sequence as defined in SEQ. ID.NO.1 and said p28-Livin β is denoted by the

amino acid sequence as defined in SEQ. ID.NO.2.

30. (New) A pharmaceutical composition comprising as active ingredient at least one

peptide as defined in claim 28.

31. (New) A pharmaceutical composition as defined in claim 30, for inducing and/or

enhancing apoptosis.

32. (New) A pharmaceutical composition as defined in claim 31, wherein said apoptosis

is induced by a treatment or agent selected from one of etoposide, anti-CD95/Fas,

TNF α and staurosporine.

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33. (New) A pharmaceutical composition as defined in claim 32, for inducing programmed cell death.

34. (New) A pharmaceutical composition as defined in claim 33, for inducing

programmed cell death of malignant cells.

35. (New) A method of inducing and/or enhancing apoptosis or programmed cell death

in cells, comprising administering an effective dosage of the peptide of claim 28, or a

composition comprising thereof, to said cells.

36. (New) The method as defined in claim 35, wherein said cells are malignant cells.

37. (New) A method of enhancing the sensitivity of cells to death-inducing treatments or

agents, comprising the steps of:

(a) Introducing a Livin-derived peptide as defined in claim 28, or a composition

comprising thereof, into a cell; and

(b) Treating said cell with death-inducing agents or treatments.

38. (New) The method as defined in claim 37, wherein said cells are malignant cells.

39. (New) The method as defined in claim 37, wherein said death-inducing treatments

or agents are selected from one of etoposide, anti-CD95/Fas, TNFa and staurosporine.

40. (New) A method of preparation of a pharmaceutical composition for the induction of

apoptosis, comprising the step of admixing one of the peptides as defined in claim 28.

with a pharmaceutically acceptable adjuvant, carrier or diluent, and optionally with at

least one additional active agent.

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41. (New) A method of treating cancer, said method comprising administering a therapeutically effective amount of the peptide as defined in claim 28, or a composition comprising thereof, to a subject in need of said treatment.